

MIT's Oldest and
Largest Newspaper

tech.mit.edu



WEATHER, p. 4

TUE: 46°F | 35°F
Sunny
WED: 58°F | 45°F
Rain
THU: 50°F | 31°F
Mostly sunny

Volume 136, Number 1

Tuesday, February 2, 2016

MIT's design wins
SpaceX challenge
Hyperloop pod named 'best overall design,' recognized for its feasibility

Ray Wang and Emma Bingham
STAFF WRITERS

A team of 25 MIT students took the Best Overall Design award in the first stage of SpaceX's Hyperloop Pod competition this weekend. Their design for a pod that will shuttle between San Francisco and LA at prodigious speeds beat those of over 120 teams at the competition's Design Weekend, held at Texas A&M University.

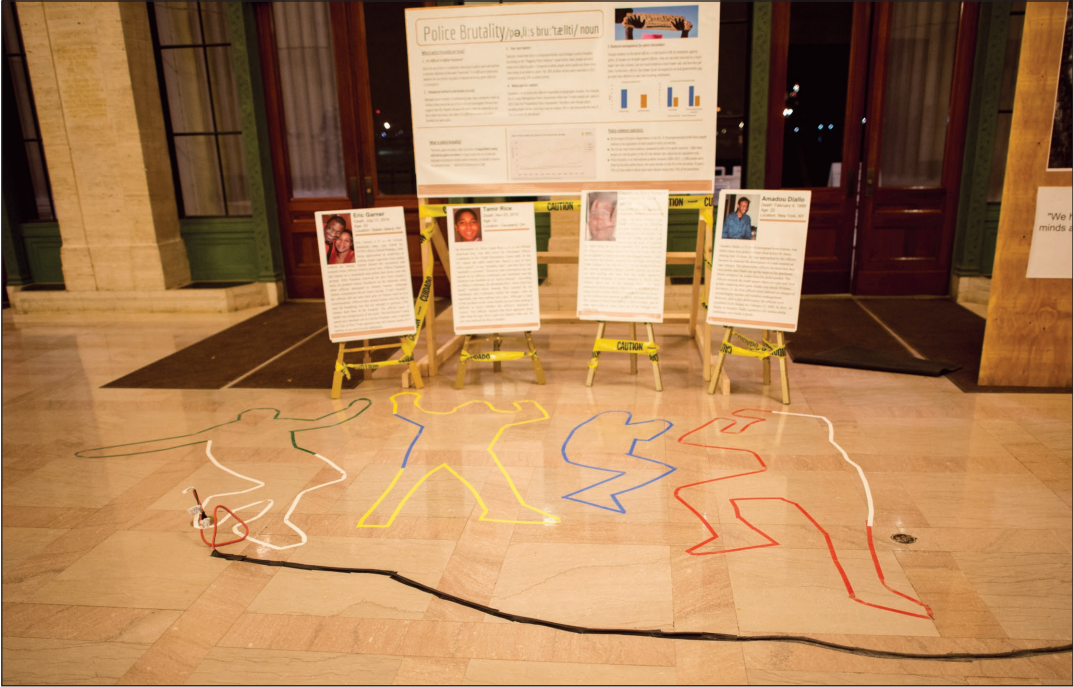
Hyperloop is a high-speed transportation system that connects cities with low-pressure tubes housing pods that ride on an air cushion. It was first conceptualized

by Elon Musk and SpaceX in 2013 and was motivated by what they see as a need for alternative methods of inter-city transportation.

Instead of building the Hyperloop himself, Musk outsourced it. Last June, he announced a competition to solicit designs for the Hyperloop pod, targeted at university students as well as independent groups.

John Mayo G, project manager of the MIT Hyperloop Team, was drawn to the engineering challenge of the Hyperloop pod and its potential. "We're developing some-

Hyperloop, Page 2



LENNY MARTINEZ—THE TECH

Late last night students were working on setting up their installations for the annual MLK exhibit. The exhibit is a part of an IAP course, Martin Luther King, Jr. Design Seminar (17.922). This year's exhibits address topics such as police brutality and lack of diversity at the Academy Awards.

IN SHORT

The Red Cross will be holding a blood drive in La Sala de Puerto Rico Monday, Feb. 8 through Friday, Feb. 12. Appointments are available 1 p.m. to 6 p.m. each day, except Tuesday when they are available 8 a.m. to 1 p.m. Register at <http://web.mit.edu/blood-drive/>

The European Career Fair will take place Feb. 6, 2016.

The APO book exchange will continue to be open for sales through Friday, Feb. 5 from 10 a.m. to 5 p.m. in W20-307.

The It's On Us Informational Fair will be taking place on Wednesday Feb. 3, from 11:30 a.m. to 2:30 p.m. in the Bush Room.

Send news and tips to news@tech.mit.edu.

New 'Sandbox' funds
innovation, projects
Students from across Institute will be able to receive up to \$25K for projects

Scott Perry

Students will soon be able to apply for funding from Sandbox, a two million dollar innovation fund announced Jan. 25 by Ian Waitz, Dean of the School of Engineering.

Sandbox will be open to all students, from all departments, and will support projects with up to \$25,000 in funding.

"The primary aim of Sandbox is to develop people, not necessarily startups or products," Waitz told the MIT News Office. "But the learning will be in the context of advancing an entrepreneurial venture or innovative idea — one that serves an important market or social need."

The first recipients of funding were members of StartMIT. In a soft launch of the program, some members have already submitted their proposals to Sandbox. These proposals were evaluated last week, and some have begun to receive funding.

The program will open to the rest of the MIT community sometime in March. To apply for funding from the program, students or teams need only submit an initial proposal outlining their project and what the money will be used for.

The fund will grant initial seed money of \$1,000 and match the student with a mentor to help them with their project. Waitz stresses that the mentorship component of the program is crucial because

it provides students with someone who can help them fully develop their idea, as well as connect them with sponsors interested in their idea.

The program was conceived of almost five years ago, after the engineering department determined that innovations from MIT alumni were among "MIT's greatest contributions to the world." The department then decided to create a fund to invest in students' ideas.

However, according to Waitz, "the initial conception of the program was not as well-suited for students as the department would have liked. The requirement to have students pay back the money was too restrictive and the initial sponsors, which were almost all venture capital firms, did not span the full range of student interests."

To alleviate these problems, the fund removed the requirement for students to pay back the seed money, though students are still encouraged to do so. The fund has also partnered with a more diverse array of sponsors, including individual donors.

Though the program grants money to support student projects, Waitz emphasized that the program was about "developing the students, not the ideas."

To further this goal, the program does not impose many temporal requirements on the students

Sandbox, Page 2

Amendments
may check
judicial
power

UA Council will consider Wednesday an amendment to the constitution that would allow Council to unilaterally remove a sitting president who fails to maintain a full Judicial Review Board, the board's chair, Olivia Brode-Roger '17, said in a board meeting yesterday.

The amendment would have prevented the presidential impeachment stalemate that took place last spring. In that case, the Judicial Review Board needed to weigh in before Council could consider an impeachment, but the board wasn't able to do so since only two of the board's three seats were filled.

Brode-Roger also discussed several other proposed amendments that would affect the Judicial Review Board, and discussed some of her plans for the

Judicial Board, Page 5



TRISTAN HONSCHEID—THE TECH

A SpaceX-themed hack appeared in Lobby 7 Sunday morning commemorating the spaceflight company's recently completed JASON-3 mission.

LETTER FROM THE EDITOR

Engagement makes a better community. So share your thoughts with us! **p. 4**

HOW ARE THE CELTICS DOING THIS SEASON?

A breakdown of Boston's spotty performance but stellar coaching. **SPORTS, p. 12**



9 TO 5 IN THE ROLO-DEX ERA

A 1970s tale of friendship and revenge in MTG's latest production.

PHOTO, p. 6

CAN YOU FINISH THIS BELLY WORK-OUT?

Sweat with our latest crosswords. **FUN, p. 9**

SECTIONS

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Project manager spent 25 hours a week on pod

Students from four majors helped design the MIT team’s winning Hyperloop capsule

Hyperloop, from Page 1

thing that doesn’t even exist yet — there’s nothing to base it off of,” he told *The Tech* in an interview. “We want to work on new technologies that help shape the world for the better ... and Hyperloop is one of those, so of course we were gonna do this competition.”

The team, which has 25 graduate students, collects members from aeronautics, mechanical engineering, electrical engineering. The team even recruited several MBA students from Sloan business school. “It’s almost like a startup,” Mayo said.

Mayo, chief engineer Chris Merian G, and team captain Philippe Kirschen G formed the core leadership of the group. The trio made the driving decisions and came up with ideas that captured what the whole team was thinking. Mayo estimates he spent up to 25 hours a week working on Hyperloop. “Everybody was putting in 15 to 20 hours a week, on top of all their research as graduate students or their classes.”

The MIT squad had four subteams, in addition to business — vehicle dynamics, electronics and software, aerodynamics, and levitation. While the idea for a train in a vacuum tube has been around for a hundred years, the components haven’t been combined until now.

“The defining things of our pod are the aerodynamic shell, the frame, the levitation skis, the suspension, the lateral control modules, and the braking modules — along with the electronics and software, which is the nervous system,” Mayo said.

The basic science behind the levitation system has been tested, but it hasn’t been applied in quite the same way.

“Our levitation skis are a magnet array, which uses the Halbach effect ... The pod is being propelled, and that causes the magnets to move over the track ... and that makes our pod float,” said Mayo.

After the initial propulsion, which can be as low as 5 to 10 meters per second, the pod needs no energy to stay afloat. “The actual act of levitation takes no power,”

Hyperloop, Page 3

Fund will accept multiple requests from students

Dean of Engineering hopes fund becomes ‘entrenched ... the way UROP or UPOP has’

Sandbox, from Page 1

“so that it can marry well with the way that students develop ideas at MIT, where they don’t always have tons of time to devote to the their project,” Waitz said.

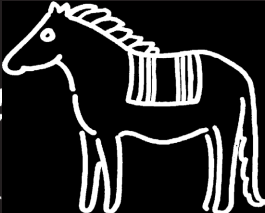
Though Waitz and Sandbox Executive Director Jinane Abounadi PhD ‘98 have figured out most of the essentials, there is still much that has not yet been decided. For example,


no limit has been imposed on the number of individual proposals a single student can submit; the program is considering implementing one if funds become short.

Waitz said he will know if the program is successful if students know about it from other students’ positive experiences.

In the future, Waitz hopes that Sandbox becomes “entrenched in the Institute’s culture much in the way UROP or UPOP has.”

Can you beat this drawing?
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E-mail join@tech.mit.edu





Roadkill Buffet in their IAP show “Improv About P___!”

NINA LUTZ—THE TECH

STILL THIRSTY?

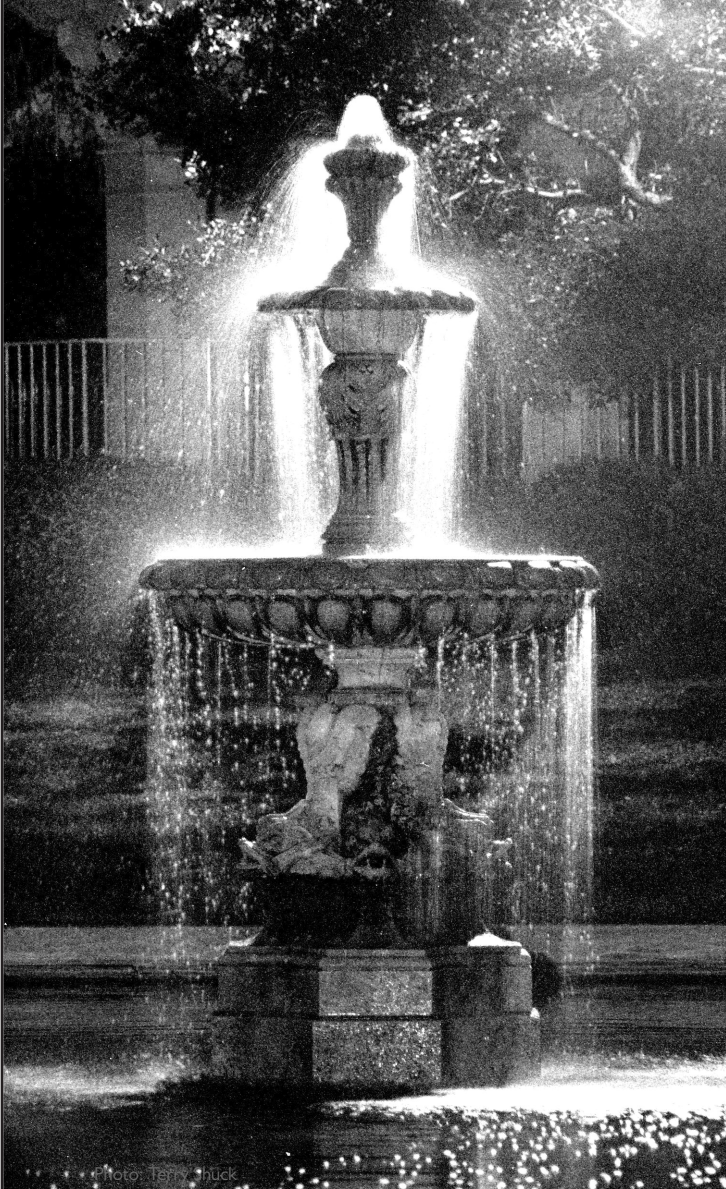


Photo: Terry Thuck

By adding 2 or 3 subjects to your required HASS Concentration, you can build a 6-subject minor that allows you to explore your field of choice in greater depth. Each year hundreds of MIT students decide to minor in the Humanities, Arts, and Social Sciences.

Minor in one of 30 HASS fields.

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History of Architecture & Art

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Linguistics

Literature

Music

Philosophy

Political Science

Public Policy

Regional Studies

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shass.mit.edu/undergraduate/minors

Fossil Free sit-in breaks after months

The Fossil Free MIT sit-in is no longer continuous, with participants occasionally disbanding if administrators are not present. Sometimes the sit-in may disband if "there are only a couple of people there," Geoffrey Supran, a member of the group, said.

The sit-in, which was originally to be continuous but has since become sporadic, started Oct. 22 in response to the administration's unveiling the Plan for Action on Climate Change.

The Institute's stance, as described in the plan, is that MIT has a better chance to work toward combating climate change "not by distancing [itself] from fossil fuel com-

panies, but by bringing them closer to us."

Fossil Free members noted a surge in student interest and participation in the sit-in following the "Vigil for Climate Action" that the group held in November, with new sitters dropping by each day.

Fossil Free continues to pursue negotiations with MIT administration in their campaign for MIT to divest from fossil fuel companies. Members of FFMIT did not disclose the details of the ongoing, closed-doors discussions as per administration guidelines. They do not yet feel that their terms have been met and will thus continue to protest.

— Vivian Zhong



ALEXANDER C. BOST—THE TECH

Paper airplanes are suspended above the W20 stairs on Sunday advertising xFair, hosted by MIT TechX and MIT Tau Beta Pi.

Team struggled with levitation and braking system

Will build prototype that will compete on test track at SpaceX headquarters in CA

Hyperloop, from Page 2

claimed Mayo. For the final competition, which is an actual test of a half-scale prototype, SpaceX will provide a propulsion system that will rocket the pod off at 240 miles per hour.

"We were focusing on innovating in a couple areas here. We wanted to build a system that could scale up to a full hyperloop system, but we also wanted to be sure that it was feasible enough and small enough that we could build this in the spring semester to

test it this summer."

"If it's too complex, it's not buildable in that short amount of time," Mayo said.

With the speeds that the Hyperloop is expected to reach, braking safely is a huge issue that the team had to tackle. "In the actual competition, the track is only a mile long, so we're accelerated 2.4Gs. And if you stay at that speed, your run is about 10 seconds, and you need to stop at a similar 2.4Gs to be able to not hit the end of the tube and crash," said Mayo.

"Another big thing is ... a brak-

ing system that is hydraulic and spring-powered," Mayo said. "It's able to clamp down on the center rail on the SpaceX track and stop us at 2.4 Gs of deceleration. The hydraulic cylinders hold the brakes open, and then springs clamp it shut. If we have any power loss ... it just clamps shut automatically."

So, how did they beat out over 120 other teams, representing 27 states and 20 countries?

Mayo notes that they won Best Overall Design, not Most Innovative. "I think the best thing that

stood out about our design is the fact that it is feasible and buildable. One of our main focuses was something we could build and physically test in this competition scope."

They will now begin building a prototype of their pod to be tested this summer on a one-mile track under construction at SpaceX headquarters.

"This week, we're recapping, we're looking at our designs, being sure that all the nuts and bolts fit," said Mayo. "We're gonna start building some parts, getting a lot

parts outsourced and machined ... After that, we will start assembling the pod and testing the individual subsystems — doing things like being sure our brakes apply the correct force, being sure the frame can handle the loads it'll see, building a small model of the levitation system."

Ideally, they'd like to put their pod together by the first week of May, and possibly go out the Hyperloop track in California and test it. Twenty-two other teams that qualified from the design stage will also be testing their prototypes.

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Letter from the Editor

The Tech printed its first issue in 1881, in the year of the twentieth anniversary of MIT's founding. The founding board of editors set a mission for the fledgling publication, brought into being by “public spirit.” *The Tech* would provide “an avenue for the expression of public opinion.”

Their aim was tied intimately to the mission of universities in general and to MIT in particular. To make discoveries, to create new knowledge, and to share and propagate that knowledge

requires an avenue for the free exchange of ideas which a newspaper is uniquely situated to provide.

In today's issue, the first of the one hundred and thirty-sixth volume, we report on four stories which highlight the thrumming energy of discovery and creation that animates and characterizes MIT, from students working to revolutionize the way we move through space, to new initiatives which reduce the barriers to creation, to questions about self-governance, and stories of

activism that challenge our self-definition as a community.

Yet just as important, if not more so, to the founding board of editors, was the newspaper's commitment to the students, their readership. *The Tech*, they proclaimed, “will exercise a guardian care over the members of the school, protecting the Freshman, curbing the Sophomore, correcting the Junior, and supporting the Senior in his old age.”

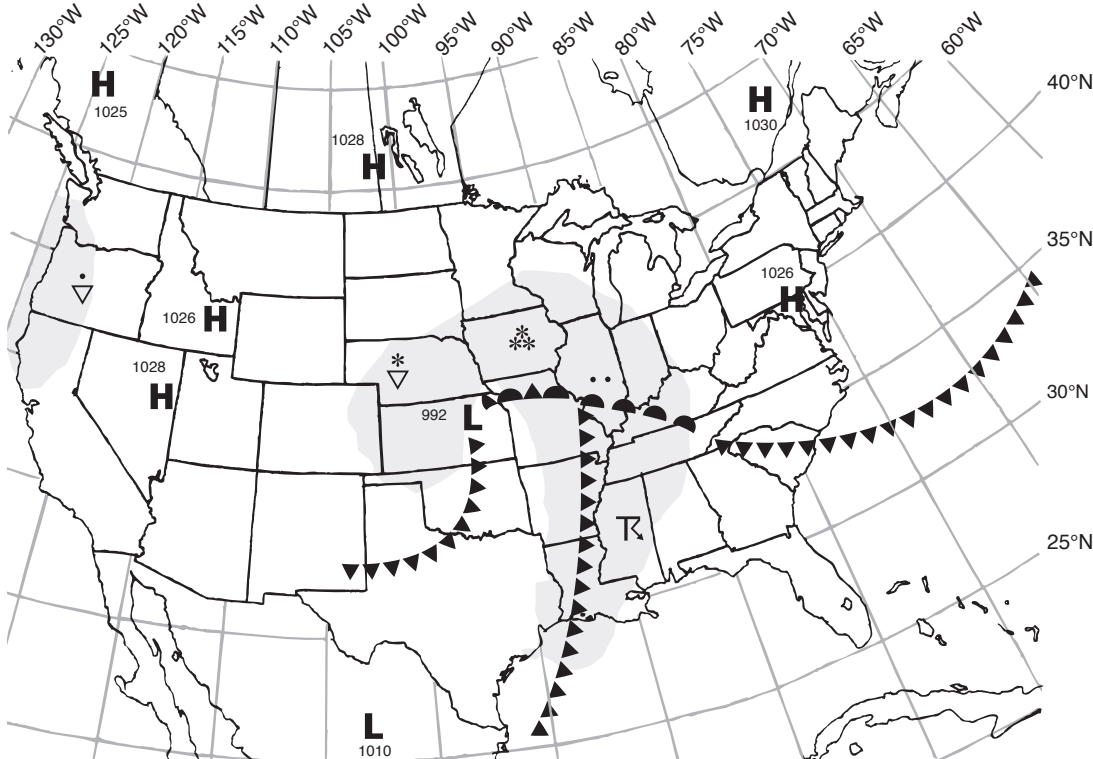
As a newspaper, our goal is to inform, provoke, and challenge.

It is also to ensure, as the board of the first volume put it, that “the efforts we make are stepping-stones to further attainments.”

As we move forward, I want to revisit our commitment to our readership and ask for your input in shaping the future direction of *The Tech*:

What should a newspaper, produced by MIT students for the broad MIT community, be doing today?

Katherine Nazemi
Editor in Chief



Situation for Noon Eastern Time, Tuesday, February 2, 2016

Weather Systems	Weather Fronts	Precipitation Symbols	Other Symbols
H High Pressure	- - - Trough	Snow *	Fog
L Low Pressure	Warm Front	Rain ∇	Thunderstorm
§ Hurricane	Cold Front	Light *	Haze
	Stationary Front	Moderate **	
		Heavy ***	

Compiled by MIT Meteorology Staff and The Tech

WEATHER

A May-like start to February

By Vince Agard
STAFF METEOROLOGIST

Barely a week after a historic blizzard left much of the northeastern United States buried in snow, spring-like weather has spread along the East Coast. In Boston, where only 6.1” of snow were received in the January 23 storm, temperatures neared record levels at the end of the month. The January 31 high

temperature of 57°F (14°C) at Logan Airport was 5°F shy of the record high of 62°F (17°C) set in 1913. The next day, the temperature reached 65°F (18°C), just 1°F short of the all-time record for February 1. For comparison, the normal high temperature is 36°F for this time of year, and the normal high won't reach 60°F until April 27.

Boston will have another opportunity to break a high

temperature record on Wednesday, as a strong southerly flow brings warm air back to the region ahead of an afternoon cold front. Rain will move into the area, possibly becoming heavy at times as the front passes through tomorrow afternoon. Depending on the timing of the front and the associated rain showers, the temperature may again fall just short of the February 3 record high of 59°F (15°C).

Extended Forecast

Today: Sunny, high 46°F (8°C). Winds NW at 5-10 mph.

Tonight: Becoming cloudy late, low 35°F (2°C). Winds becoming S at 5-10 mph.

Tomorrow: Morning clouds portend afternoon rain showers, high 58°F (14°C). Winds S at 15-20 mph.

Thursday: Mostly sunny, highs around 50°F (10°C).

Friday: Mostly sunny, highs in the upper 30s °F (4°C).

OPINION POLICY

Editorials are the official opinion of *The Tech*. They are written by the Editorial Board, which consists of Chairman Will Conway, Editor in Chief Leon Lin, Managing Editor Anthony Yu, Executive Editor Kath Xu, and Opinion Editor Claire Lazar.

Dissents are the signed opinions of editorial board members choosing to publish their disagreement with the editorial.

Letters to the editor, columns, and editorial cartoons are written by individuals and represent the opinion of the author, not necessarily that of the newspaper. Electronic submissions are encouraged and should be sent to letters@tech.mit.edu. Hard copy submissions should be addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. All submissions are due by 4:30 p.m. two days before the date of publication.

Letters, columns, and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted,

all letters become property of *The Tech*, and will not be returned. Letters, columns, and cartoons may also be posted on *The Tech's* Web site and/or printed or published in any other format or medium now known or later that becomes known. *The Tech* makes no commitment to publish all the letters received.

Guest columns are opinion articles submitted by members of the MIT or local community.

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LENNY MARTINEZ—THE TECH

An orchestral tribute concert to David Bowie was held last Friday in Kresge Auditorium. The event was presented by MIT Music and Theater Arts in collaboration with Orange Mountain Music and Richard Guerin. All proceeds went to support the Koch Institute Frontier Research Fund for cancer research at MIT.

Judicial Board, from Page 1

coming year.

She said that another proposed amendment would make it easier for the rest of the UA to override any very unpopular decisions the board might issue: together with the president's approval, the supermajority needed to amend the constitution would be able to do so without the extant restriction that the amendment must "lie on the table for at least one meeting."

Our decisions "are incontestable and must be acted on immediately," she said. "We don't want to lower the bar [for overriding a decision] to below an amendment, [but] we can make it faster."

Brode-Roger also said that a more specific structure for the board has been proposed as an amendment.

She said the proposed structure would allocate the board's three seats to a sophomore, a junior, and a senior. Council would be able to choose each year, by a simple majority vote, to either promote each member to the next seat or remove the member from the board; those serving in the senior position would automatically be

removed, even if they were to continue another year as an undergraduate.

Brode-Roger hopes that the new structure would improve the board's continuity.

These amendments are among those coming out of the UA's Bylaws Committee. That committee, UA Vice President Sophia Liu '17 said, is tasked with reviewing the UA's governing documents.

Besides constitutional amendments, Brode-Roger is also thinking about ways to better publicize the Judicial Review Board.

She plans to make the board more well-known by visiting each undergraduate dormitory during a house meeting and discussing "how the UA is on a constitutional level."

Since the summertime, Brode-Roger has also been looking at better ways for undergraduates to submit complaints to the board. At a meeting last summer, she discussed the possibility of creating an RT Queue to track complaints. Yesterday, she said that she might ask IS&T to provide an instance of the queue so that the UA would not have to maintain the software itself.

— William Navarre

A sampling of people you'll meet during a typical dinner at *The Tech*:

Lenny, Course 2	Samir, Course 16
Michelle, Course 3	Katherine, Course 17
Jiahao, Course 6	Claire, Course 18
Patricia, Course 8	Jack, Course 19
Vivian, Course 9	Tara, Course 20
Amy, Course 10	Mirny, Course 21
Vince, Course 12	Karleigh, CMS
Fiona, Course 14	Alex, Course 22

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Violet Newstead (Hallie N. Voulgaris '17) shows Judy Bernly (Carrie M. Fowle '18) the ropes on Judy's first day at the office.



Doralee Rhodes (Chamille J. Lescott '16) confronts her boss Frank Hart (Geoffrey W. Hegg '16) after learning that he's been spreading rumors about a relationship between them.



Doralee Rhodes (Chamille J. Lescott '16) rides on top of Frank Hart (Geoffrey W. Hegg '16) during a dream sequence.



Chamille J. Lescott '16 sings during the opening of "9 to 5".



Noelle A. Colant '17 as Roz Keith during "Heart to Hart".



The ensemble (Kristina S. Kim '17, Jeremy T. Wright '17, Sienna A. Ramos '18, Leigh-Ana Rossitto '19, Amanda J. Liu '17) happily watches as Violet Newstead (Hallie N. Voulgaris '17) prepares a potion to make Frank Hart (Geoffrey W. Hegg '16) disappear during a dream sequence.

MTG Presents
9 to 5



In an unplanned turn of events, Frank Hart (Geoffrey W. Hegg '16) confronts the people that have been controlling his company after kidnapping him.



The musical's heroines: Judy Bernly, Violet Newstead, and Doralee Rhodes (Carrie M. Fowle '18, Hallie N. Voulgaris '17, and Chamille J. Lescott '16 respectively) sing during the finale.



Carrie M. Fowle '18 sings as Judy Bernly during the opening of "9 to 5". At the start of the story, Judy Bernly has been forced to get a job because her husband has run off with his secretary.

Photography by Lenny Martinez

Solution, page 11

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Solution, page 11

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–9. Follow the mathematical operations for each box.

Solution, page 11

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

Belly Workout by Gail Grabowski

Solution, page 11

ACROSS

1 Peaceful
5 Airplane tracking device
10 Writing tablets
14 Three-layer cookie
15 Girl in Wonderland
16 Brother of Cain
17 Reclined
18 Wandered around
19 Actor's part
20 Declined to vote
22 Film-studio production
23 Pays to play poker
24 Lightest in color
25 Crudely built hut
28 Famous person, for short
29 Big marching-band instruments
30 Fry lightly
32 Liquid for frying
35 Letter before tee
36 Doesn't have
37 Alias letters
38 You-know-____
39 Old West search party
40 Medical remedies
42 React to a joke

44 Chinese bearlike beasts
45 Pirate flag images
47 In separate pieces
49 Result of poor café service
50 Plentiful supply
54 Metallic rocks
55 Statistical diagram
56 __ or less (approximately)
57 Alternative to suspenders
58 Ward off
59 Wicked
60 Puts into words
61 __ board (manicurist's tool)
62 Small bits of paint

DOWN

- 1 Coke or Pepsi
- 2 The typical Jordanian
- 3 Luau garlands
- 4 State west of North Dakota
- 5 Uncommon occurrence
- 6 Without help
- 7 Plunges into a pool
- 8 Scored 100% on
- 9 Color of Santa's suit
- 10 Inmate's early release

- 11 On the up-and-up
- 12 Sandwich shops
- 13 Frozen rain
- 21 44 Down pests
- 22 Boy or man
- 24 Furry or feathered friends
- 25 Slow-cooker meal
- 26 "Keep quiet!"
- 27 "For sure!"
- 28 Pickle veggie
- 30 Cummerbund, for instance
- 31 Appliances that cool:
Abbr.
- 33 Scandinavian furniture
chain
- 34 Scottish girl
- 36 Fireplace fillers
- 39 Solid part of orange juice
- 40 Joker or jack
- 41 Not domesticated
- 43 Sought-after guest
rosters
- 44 Kitchen closet
- 45 Snooty people
- 46 Seoul, South ____
- 47 Subside

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48 Less diluted
50 "Excuse me . . ."
51 __ Scotia, Canada

52 Baby's bed
53 Snakelike swimmers
55 Letters after B

Hot Stuff by Andy Ellis

Solution, page 11

ACROSS

- 1 Film excerpt
- 6 A billion years
- 9 Leafy retreat
- 14 One in the lead
- 15 Proclaim
- 16 Bel __ cheese
- 17 START OF A QUOTE
- 19 Chilly quarters
- 20 Vituperate
- 21 Marine: Abbr.
- 22 NL East city
- 23 Antediluvian
- 24 GPS determination
- 25 Rodeo beast
- 28 PART 2 OF QUOTE
- 32 Caesarean conquest
- 33 Site of confusion
- 34 Crime-fiction pioneer
- 35 PART 3 OF QUOTE
- 40 Loudspeakers, for short
- 43 Chilean cheer
- 44 Bahrain leader
- 47 END OF QUOTE
- 52 Vatican venue
- 53 "I hate it!"
- 54 Series ender

56 Debate participant
57 Well-thought-out
59 Miles away
60 Some strings
62 Source of quote
64 British pop star
65 Muesli morsel
66 Weak-__ (timid)
67 Early PC software
68 Three, in Capri
69 Deposition aide

DOWN

- 1 Prefix for "coil"
- 2 Publisher's roster
- 3 Spiny anteater
- 4 Carl's Cosmos successor
- 5 Directional ending
- 6 Posh property
- 7 Where Interstate H-1 is
- 8 Dacha denial
- 9 Honey source
- 10 Motley
- 11 Baggage handler
- 12 Granada grizzly
- 13 Old auto from Olds
- 18 Knot on a tree

24 Julia ex
25 Dollop
26 Farm sound
27 Sports drink suffix
29 Valentine
 misspelling
30 Language source of
 "chocolate"
31 Mauna ____
36 Hockey area
37 South African golfer
38 Sister of Rachel
39 Source of green
 eggs
40 Instagram upload
41 Shade of gray
42 Bound, in a way
45 Unfrozen, as
 harbors
46 Gotten back
48 Mythical lyrist
49 Contradicts
50 Significant
51 Omen interpreter
55 Belief, in brief
57 Sticky situation
58 A little open

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59 Dad's mom's daughter
60 Web filmer

61 O execs
63 Green-lights

Orange Bowl by Fred Piscop

Solution, page 11

ACROSS

- 1 Last stop before home
- 6 Chamber music group
- 11 Site of Gump heroics
- 14 Backer of the Bulldogs
- 15 Oslo native's homeland
- 16 Shout like "Bravo!"
- 17 Tarantino comedy crime caper
- 19 App glitch
- 20 Addition column
- 21 "Wait a minute . . ."
- 22 City near Cremona
- 24 Mason's tool
- 26 Wombat cousin
- 28 Wall-tile descriptor
- 32 Artist fond of lilies
- 35 Confront
- 36 Read Across America Day sponsor
- 37 Eiffel Tower, essentially
- 38 Uses leverage
- 40 Make known
- 41 Unalterable
- 42 Important stretches
- 43 Far from windy
- 44 Players getting byes, often

48 Lawbreakers, so to speak
49 Panoramas
52 Cuban base, familiarly
54 Title given to Poitier
55 Go sprawling
57 Response to a bailiff
58 Michael Keaton film of '88
62 Floral welcome
63 Boot out
64 Beverly Hillbillies star
65 Indelible-ink design, for
 short
66 Melodramatic
67 Crawls (with)

DOWN

- 1 Keyboard slip
- 2 Frequented spot
- 3 Not as hale
- 4 Unwraps eagerly
- 5 Telephone trio
- 6 At the ready
- 7 French fragrance firm
- 8 Part of TNT
- 9 Vanity
- 10 A bit after the hour

- 11 Obvious choice
- 12 Scholarship source, perhaps
- 13 Prefix for phone
- 18 "Uh-huh"
- 23 In-flight stat.
- 25 Rainy
- 26 Slapper starter
- 27 Lofty lines
- 29 Faulty
- 30 Pink Panther collectibles
- 31 Close kin of cabbage
- 32 Niagara Falls by-product
- 33 Deep-fried carnival treat
- 34 Lacking the motivation
- 38 Attend Eton, e.g.
- 39 Florida major leaguers
- 40 Lab glassware
- 42 Dons judge's garb
- 43 Manning stats
- 45 Sleep study acronym
- 46 How villains behave
- 47 Limerick's land
- 50 Ascend
- 51 Attack command
- 52 __-edged (best-quality)
- 53 Inspiration

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54 Aerobics class prop
56 Highlighters, for instance
59 "Outer" prefix

60 Clean Water Act
administrator
61 Airbus product

Close games have been a worry for the C's; as the regular season reaches its climax and playoff spots are on the line, the margin of error gets increasingly narrower

they just did not have the size to be a good defensive team. Fans have salivated at the prospect of finding that huge center to clog the middle and provide the shot blocking this team has lacked for a long while. Given the individual liabilities one would expect from players like Kelly Olynyk and Isaiah Thomas, this team seemed to be a recipe for defensive disaster. But that has yet to be the case.

Right now, the C's are second in the league in points allowed per 100 possessions, trailing only the Spurs. Crisp rotations and incredible energy fuel a typically small Boston lineup. They work hard, force turnovers, and contest every shot. Jae Crowder, Marcus Smart, and Amir Johnson all have been huge on this end of the court, making fantastic plays every game. There are times when this team has lapses and gets picked apart, but they do a great job communicating and tend to recover quickly. Thomas is heading to his first All-Star game, and while his of-

REBOUNDED: B-

The Celtics are not a huge team and while this hasn't really hurt them when it comes to forcing misses, they do have a tendency to get beat up on the boards. When the team comes together and collectively rebounds, they do a great job. Marcus Smart very aggressively attacks the ball and Jae Crowder and Evan Turner provide great help on the wings. However, this team sometimes has a tendency to leak out after a shot is put up and this can be costly, giving the other team extra chances they shouldn't be getting. When the energy and effort is there, this team is perfectly fine securing the ball and can even use its speed to get some offensive rebounds of its own. There have been a few games this season that second-chance points have caused a lot of unnecessary

CONSISTENCY: C+

Celtics have lacked consistency up to this point in the season. Some nights they come out and absolutely impress. Other times, they are lackluster and lose to a team they are clearly capable of wiping the floor with. When the shots are not falling from the outside, they don't seem to have a backup plan.

A lot of that makes sense. You do not want to stop playing your brand of basketball, but the Celtics have to find other ways to snap out of these funks if they want their record to reflect the work they have done. It can be maddening to see a flurry of threes fall one night only for it to rain bricks the next, but this happens to every team and it should not always determine the fate of the game. Working the ball down low and consistently attacking the basket will do them well in these games in the second half of the season.

On a brighter note, the energy and effort always seem to be there. Their defense always

comes to play because they always scrap and fight. It's really better decision-making in these situations, not necessarily effort, that would do them some good.

CLOSING: C

Close games have not been kind to the Celtics up to this point. When it comes down to the wire, the team has not been able to pull away or keep up with their opponents. It's not because the energy and effort is not there. It's not that they are not getting great looks. Shots just have not fallen for them. Outside of Isaiah Thomas, the team does not really have anyone to get them good isolation baskets at the end of the game. And as gifted as he is, sometimes your five-foot-nine point guard taking fadeaway mid-range jumpers just is not going to get the job done. To his credit, he hits them at a high enough rate for me to instinctively consider it a good look. When it gets close, the transition baskets and usefulness of rotations diminish, exposing the limitations of this roster. They can hunker down defensively, but that can only

do so much if they are clunking shots on the other end. Brad Stevens has drawn up some terrific plays that have gotten them key, clutch baskets (most recently a game-winning layup by Jae Crowder against the Wizards) so the potential is there. It's on the players to perform better in these intense situations. The coach can draw you up a look, but if you can't hit the shot it's not going to do you any good.

COACHING: A-

Brad Stevens has done an excellent job with his team once again. The Celtics have gotten better each season he has been here, and while the improved talent on the roster also contributes to that, he has no doubt gotten a bunch of average players to play collectively at an above-average level. The rotations that have made this team so great defensively are no doubt his doing. They run some great offensive sets after timeouts and at the end of games that have gotten them great looks, even if they do not always fall. The future only seems bright.

OVERALL: B+

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Moderator: Claude Grunitzky, a serial entrepreneur and MIT Sloan Fellow, is the founder of TRACE, and co-founder and editor-in-chief of TRUE Africa, a new media platform. He was raised between Lomé, Togo; Washington, DC; Paris and London.



Joelle Itoua-Owona was born and raised in Douala, Cameroon. She moved across France, the UK and Germany for Masters degrees on management and strategy. She completed a MBA at MIT Sloan where she is president of the Africa Business Club.



Devon Maylie spent three years in Johannesburg as a writer for the *Wall Street Journal*. She covered the region during a period of renewed optimism about Africa's outlook from foreign investors and the diaspora alike.



Gbemi Munis is currently in the Sloan Fellows MBA program at MIT. Prior to Sloan, she worked in the tech industry in US and Nigeria developing technical business solutions for enterprise customers in financial services, oil and gas, and consumer goods industries.



Jacques Jonathan Nyemb is a lawyer and policy advisor. He is currently at the Harvard University Kennedy School where he co-chairs the Africa Caucus. He was formerly attorney-at-law at Cleary Gottlieb Steen & Hamilton LLP, advising on project finance.

Boston Celtics' mid-season review

Despite hot streaks, inconsistency is currently dooming the Celtics

By Zachary Collins
SPORTS WRITER

Up to this point, the Celtics have played some pretty good basketball. Currently, they are seeded 5th in the Eastern Conference — a spot worthy enough for a playoff bid — and have even inspired the hope that they will climb a few more spots as they play through the second half of this NBA season. The numbers behind the games seem to indicate this too. Right now, the Celtics are seventh in the league in point differential, behind the six teams who currently have the best six records in the league. Basically, when this team comes to play, they play very well. Unfortunately, there seem to be many nights that the Celtics just do not get the job done.

OFFENSE: B

The Celtics have some capable shooters on their roster. Brad Stevens has done everything he can to get these shooters looks from the outside, and the Celtics are not afraid to let loose. Oftentimes this can demoralize opposing teams, but it can also be

a blessing. The Celtics seem to be at their best when players like Jae Crowder, Isaiah Thomas, and Evan Turner attack the basket. They can drive in and either create looks for themselves, or for their teammates waiting on the wings. Oftentimes these shots do not fall and the Celtics seem content with swinging the ball and taking errant shots from the three point line. This takes them out of their rhythm and kills a lot of the flow that makes this pace and space offense function.

The transition game is really this team's bread and butter. They look to push the ball whenever possible, and the speed of the backcourt coupled with capable shooting from their bigs allows them to find great shots. When things are not going in the half-court, this team often makes up for it by escalating the pace, forcing turnovers and propelling the ball up the court.

DEFENSE: A

The one knock on the Celtics coming into the season was that

Celtics, Page 10



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